

Serial No. 09/774,723

H-961

9. (Amended) A method for evaluating polishing pad surface conditions as described in claim 5, further comprising the following steps:

detecting fluorescence generated by said polishing pad due to said illumination;

further evaluating deterioration of said polishing pad surface based on an intensity signal of said detected fluorescence; and

outputting results from said evaluation based on the intensity signal.

10. (Amended) A method for evaluating polishing pad surface conditions as described in claim 9, wherein a fluorescence image is obtained from the fluorescence generated by said polishing pad; and deterioration due to contaminants on said polishing pad surface is evaluated based on said fluorescence image.

11. (Amended) A method for evaluating polishing pad surface conditions as described in claim 9, wherein said information of said evaluation results is displayed on a display.

Serial No. 09/774,723

H-961

14. (Amended) A device for evaluating polishing pad surface conditions as described in claim 16, wherein said polishing fluid removing means removes polishing fluid adhered to said polishing pad surface by blowing a gas onto said polishing pad surface.

16. (Amended) A device for evaluating polishing pad surface conditions comprising:

means for removing polishing fluid adhered to at least an area of a polishing pad surface;

means for using light to illuminate said area on said polishing pad surface from which said polishing fluid was removed by said polishing fluid removing means;

means for capturing images imaging an area illuminated by said illuminating means and obtaining an image of said polishing pad surface;

first evaluating means for evaluating deterioration of said polishing pad surface based on an image of said polishing pad surface obtained through said image capturing means; and

first outputting means for outputting information of results from said evaluating means.

Serial No. 09/774,723

H-961

20. (Amended) A device for evaluating polishing pad surface conditions as described in claim 16, further comprising:

means for detecting fluorescence generated by said polishing pad due to illumination from said illuminating means;

a5 second evaluating means for evaluating deterioration of said polishing pad surface based on an intensity signal of fluorescence detected by said fluorescence detecting means; and

second outputting means for outputting information of results from said evaluation.

21. (Amended) A device for evaluating polishing pad surface conditions as described in claim 20, wherein said fluorescence detecting means obtains a fluorescence image; and said second evaluating means evaluates deterioration of said polishing pad surface due to contaminants based on the fluorescence image obtained by said fluorescence detecting means.

Serial No. 09/774,723

H-961

22. (Amended) A device for evaluating polishing pad surface conditions as described in claim 20, wherein said second outputting means displays information of results evaluated by said second evaluating means to a display.

Amend

23. (Amended) A method for producing thin-film devices comprising the following steps:

forming a thin film on a substrate;
planarizing a surface of said substrate by polishing said substrate surface on which said thin film is formed using a polishing pad;

cleaning said planarized substrate; and
applying a resist to said cleaned substrate and exposing a pattern;

wherein said planarizing step includes steps for evaluating surface conditions of the polishing pad according to the method claimed in claim 5.